

IN THE CLAIMS

1. (canceled)
2. (currently amended) A method of screening for therapeutic agents useful in the treatment of a disease in a mammal, wherein the disease is selected from the group consisting of cardiovascular diseases, ~~dermatological diseases~~, neurological diseases, metabolic diseases, ~~cancer disorders~~, urological diseases, ~~gastroenterological diseases~~ and reproduction disorders, ~~in a mammal~~ comprising the steps of
 - i) determining protease a first activity of a KLK8 polypeptide in the presence of a test compound, wherein the KLK8 polypeptide comprises an amino acid sequence which has at least 90% homology with the amino acid sequence SEQ ID NO:2;
 - ii) determining the protease a second activity of said the KLK8 polypeptide in the absence of said test compound; and
 - iii) determining an effect of the test compound on a symptom of the disease in an *in vivo* assay.
3. (currently amended) A method of screening for therapeutic agents useful in the treatment of a disease in a mammal, wherein the disease is selected from the group consisting of cardiovascular diseases, ~~dermatological diseases~~, neurological diseases, metabolic diseases, ~~cancer disorders~~, urological diseases, ~~gastroenterological diseases~~ and reproduction disorders, ~~in a mammal~~ comprising the steps of
 - i) determining protease a first activity of a KLK8 polypeptide in the presence of a test compound, wherein the KLK8 polypeptide comprises an amino acid sequence which has at least 90% homology with the amino acid sequence SEQ ID NO:2;

- ii) determining the protease ~~a second~~ activity of the [[a]] KLK8 polypeptide in the presence of a ~~known~~ regulator of the [[a]] KLK8 polypeptide; and
- iii) determining an effect of the test compound on a symptom of the disease in an *in vivo* assay.

4-26. (canceled)

27. (withdrawn – previously presented) The method of claim 2 wherein the step of contacting is in or at the surface of a cell.

28. (withdrawn – previously presented) The method of claim 2 wherein the cell is *in vitro*.

29. (previously presented) The method of claim 2 wherein the step of contacting is in a cell-free system.

30. (currently amended) The method of claim 2 wherein the KLK8 polypeptide is coupled to a detectable label.

31. (currently amended) The method of claim 2 wherein the test compound is coupled to a detectable label.

32. (currently amended) The method of claim 2 wherein the test compound displaces a ligand which is first bound to the KLK8 polypeptide.

33. (withdrawn – previously presented) The method of claim 3 wherein the step of contacting is in or at the surface of a cell.

34. (withdrawn – previously presented) The method of claim 3 wherein the cell is *in vitro*.

35. (previously presented) The method of claim 3 wherein the step of contacting is in a cell-free system.

36. (currently amended) The method of claim 3 wherein the KLK8 polypeptide is coupled to a detectable label.

37. (currently amended) The method of claim 3 wherein the test compound is coupled to a detectable label.

38. (currently amended) The method of claim 3 wherein the test compound displaces a ligand which is first bound to the KLK8 polypeptide.

39. (new) The method of claim 2 wherein the disease is a cardiovascular disease.

40. (new) The method of claim 2 wherein the disease is a neurological disease.

41. (new) The method of claim 2 wherein the disease is a metabolic disease.

42. (new) The method of claim 2 wherein the disease is a urological disease.

43. (new) The method of claim 2 wherein the disease is a reproduction disorder.

44. (new) The method of claim 3 wherein the disease is a cardiovascular disease.

45. (new) The method of claim 3 wherein the disease is a neurological disease.

46. (new) The method of claim 3 wherein the disease is a metabolic disease.

47. (new) The method of claim 3 wherein the disease is a urological disease.

48. (new) The method of claim 3 wherein the disease is a reproduction disorder.

49. (new) The method of claim 2 wherein the amino acid sequence has at least 95% homology with the amino acid sequence SEQ ID NO:2.

50. (new) The method of claim 2 wherein the amino acid sequence has at least 98% homology with the amino acid sequence SEQ ID NO:2.

51. (new) The method of claim 2 wherein the amino acid sequence has at least 99% homology with the amino acid sequence SEQ ID NO:2.

52. (new) The method of claim 3 wherein the amino acid sequence has at least 95% homology with the amino acid sequence SEQ ID NO:2.

53. (new) The method of claim 3 wherein the amino acid sequence has at least 98% homology with the amino acid sequence SEQ ID NO:2.

54. (new) The method of claim 3 wherein the amino acid sequence has at least 99% homology with the amino acid sequence SEQ ID NO:2.